

VIRGINIA WILDLIFE

AUGUST 1983

ONE DOLLAR



VIRGINIA WILDLIFE

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Color separations by Lanman Dominion,
Richmond
Printing by the William Byrd Press,
Richmond

Virginia Wildlife (ISSN 0042 6792) is published monthly by the Education Division of the Virginia Commission of Game and Inland Fisheries, Box 11104, 4010 West Broad Street, Richmond, Virginia 23230-1104. Subscription rates: one year, \$5, three years, \$12.50. Submission guidelines for free lance work available upon request. The Commission accepts no responsibility for unsolicited manuscripts, photographs, or artwork. Permission to reprint material from *Virginia Wildlife* is granted provided credit is given; clearance must also be obtained from the contributing writer and/or artist. Second class postage paid at Richmond, Virginia.

Observations, conclusions, and opinions expressed in *Virginia Wildlife* are those of the author and do not necessarily reflect those of the members or staff of the Commission of Game and Inland Fisheries.

Dedicated to the Conservation of Virginia's Wildlife and Related Natural Resources
Volume 44, Number 8
August 1983

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Cover

Barred owl. Painting by John Shaw, King George. Birds of prey are among the most frequent visitors to the new Shenandoah Valley Wildlife Treatment and Rehabilitation Center. Read about the Center in "The Best Remedy," page 9.

Back cover: lower Crabtree Falls. Photo by Michael Warren, Worcester, Massachusetts. The highest waterfall east of the Mississippi River is right here in Virginia on the Appalachian Trail. Read about this and other inviting sights in "The Trail," page 16.

Letters

The Gypsy Moth

With much interest I read your recent article on the gypsy moth (May 1983) as I had 20 acres on a mountain about 50 miles north of New York City for many years and experienced most of the ghastly devastation so accurately described by Mr. Artman. It was mostly oak and some large pines (75 feet) that were completely denuded.

After the first traumatic encounter I had the place sprayed with Sevin by a Piper Cub from the air. If this is done at the proper time when the new leaves are only an inch or two in size and if it is not followed by a rain that will wash the stuff off, it is completely effective and your readers may be glad to know the spray did not affect the wildlife adversely.

I am an ardent wildlife fan who puts out several hundred pounds of feed a year and the wildlife was all still here quite as healthy as before, whereas the oak grows slowly and a mature tree cannot be regrown in a lifetime.

Davis Quinn
Williamsburg

Wildflower Fan

I very much enjoyed Ms. Sharon Morris' drawings (they are drawings and not watercolors as your table of contents stated, aren't they?) of wildflowers in the May 1983 issue.

Please count me as one of those readers who would like to see "more articles on birds and plants and fewer stories about 'how to kill wildlife.'" I agree with Mr. Hoffner (*Letters*, May 1983) that "Virginia has thousands of interesting things to write about," but I am afraid that his list of interesting subjects and mine would differ rather decidedly.

Carolyn C. Bates
Sweet Briar

You're right. Ms. Morris' drawings were done in colored pencil, not watercolors, as the table of contents stated.—Editorial Assistant

Thanks!

I would like to take this opportunity to thank you for the beautiful publication of your magazine. I can hardly get the latest issue in my school library. It helps me on projects and just about all of my school research. Thanks for being No. 1.

Melissa Harlow
New Canton

I have learned so much from reading the *Virginia Wildlife*. I'm 76 years old and don't hunt anymore, but I will always enjoy reading about the hunting experiences in this magazine. The dark print is perfect. The pictures are so beautiful I just can't throw the magazine away when I finish it. I pass it along to others to read. Next to the Bible it is the best reading material in my home.

Betty S. Riviere
Norfolk

Another Recipe?

I thoroughly enjoyed the article "Sharpen Up On Carp" by Richard M. Perry (May 1983). I'm now 72, but many years ago, I heard a good way to cook carp. First catch the carp. Clean it and soak it in salt water for 24 hours. Find a white pine board about the same size as the fish. Nail the carp to the board and sprinkle with pepper. Cook in a 360-degree oven for one hour or until done. Take the fish out of the oven and pull the nails out of the board—throw the carp away and eat the board.

Acree J. Hall
Danville

That recipe sounds as if it came from the same source as Rick Perry's recipe.—
Managing Editor

Two-Headed Gosling?

I was fascinated by the picture of the two-headed Canada goose in the June issue of your magazine! The caption reads, "Three Canada goslings enjoy the warmth of their mother." Since there are four heads, one of the birds must have two.

I truly enjoy your magazine, and have been reading it since childhood. I like the balance of articles, and the fine photography. Keep up the good work!

Chuck Harrison
Richmond

We've enrolled the caption writer in remedial arithmetic. Thanks for your letter.—Managing Editor

Closed for Business

I enjoyed your June article, "Canoeing a Legend: the Fabled James," very much. If the material is to be used in a guide book, I think you should delete the note about the "general store at Snowden," as the store is closed, I

believe permanently, and no services are now available. Strangers still ask about gas, snacks, etc.

Best wishes to your magazine.

Louise T. Williams
Big Island

Thanks for the information. Mr. Heerwald's mention of the general store was meant to indicate a landmark, rather than advertising that there was gas or anything else available. I can see that it might be confusing to someone not from the area, however.—Managing Editor

About the Authors

Dan Shuber is assistant fisheries biologist with the Commission working out of the Richmond area. His sun-fish quiz, "What's In A Name?" appeared in the special fishing issue, April 1983. Captain James Kerrick, safety officer for the Commission's education division, is well known to *Virginia Wildlife* readers as the author of "On the Waterfront." Sandra Harris of Staunton is administrative assistant to the president of Blue Ridge Community College, where she is responsible for public information and publications. She has published articles in *Shenandoah Valley* and several other Virginia magazines. Kit Shaffer was on the staff of the Commission's game division until his retirement a few years ago. He spends most of his time writing—his articles have appeared frequently in *Virginia Wildlife*—and turkey hunting. G. Bruce Potter is a junior at Washington and Lee University in Lexington. The Richmonder is a journalism major who worked on the *Virginia Wildlife* staff as editorial assistant earlier this year. Lt. Don Miller is an assistant supervisor in the Commission's law enforcement division, responsible for the education activities of the game wardens in his area; he works out of the Staunton office. This is Front Royal resident Richard Passaro's first appearance in *Virginia Wildlife*. William Weekes of Spartanburg, South Carolina has been a regular contributor to *Virginia Wildlife*.



by Dan Shuber

illustration by Phyllis Saroff

There's no denying it: the "dog days" are finally upon us. The temperature and humidity both spend more time above 80 than below it. Gamefish are sulking deep and most sane people are sipping lemonade in the shade. This time of year, fishermen are more apt to get a sunburn than a good strike. One sure way to beat the heat, and boat some fine fish, however, is to night fish for

DOG DAY CATS

Why risk sunburn and heat prostration? Try night fishing for channel catfish.

Those who have never tried this unique sport don't know what they are missing. The channel catfish (*Ictalurus punctatus*) is recognized by its deeply forked tail and numerous "whiskers." It is traditionally the guest of honor at all deep south down-home fish fries. A challenging adversary, the channel cat is equally revered for its bulldogging, stay-deep-and-run style once hooked. Each year a couple dozen 15-pounders or better "granddaddy whiskers" are crealed by Virginia anglers. Hugh Wyatt's 32-pound state record channel cat proves the existence of trophy-sized specimens. Interested?

Night fishing for channel cats is bottom fishing with bait. A baited, moderate-size snelled hook (#2-#4) 12 inches above a weight works well. Catfish are not overly particular, however, so any rig that gets the bait to the bottom will work.

The same flexibility pertains to baits, as well. Locating food primarily with their taste- and smell-sensitive barbels, channel cats can be enticed with almost any "stink" bait. Numerous secret recipes exist, with ingredients ranging from soap to cheese. The old adage, "If it smells horrible, catfish will love it," probably has some merit. For those whose constitutions (or families) won't allow them to create putrid "secret weapon" baits around the house, the old standbys of frozen bait shrimp or chicken livers will catch fish.

Finding channel catfish is not difficult, either. Most lakes and reservoirs have good populations, as do the major rivers. Citation records suggest Back Bay, Burke Lake, Diascund Reservoir, and Chickahominy Lake as catfish hotspots. Backwater or pool areas of the James, North Landing, Chickahominy and Nottoway Rivers also produce good fish. Check local regulations on night fishing before heading out.

Well, there you have it. Grab your flashlight, slap on some bug spray and head for the catfish hole. You'll enjoy some unique nighttime fishing and, once the skinning and filleting are done, some fine eating. Catch up a mess of them for supper soon. On the end of a line or the end of a fork, August channel cats are hard to beat. □



Mel White

An Ounce of Prevention

Making the right decisions before you're in the face of danger can be a matter of life and death.

by Captain James N. Kerrick

Fatalities caused by boating accidents have increased dramatically in recent years on both national and state levels. More than 1,200 people will die as a result of boating accidents in the country this year.

And 15 to 30 of those people will be Virginians.

In 1982, 62 boating accidents were reported in the state. These caused 16 fatalities, 26 injuries and \$87,000 in damage. A majority of these boating accidents resulted from careless thinking and improper safety precautions.

With a greater number of registered motorboats and an increased availability of recreational waters, the Virginia Commission of Game and Inland Fisheries has been continually challenged in its efforts to stress boating safety.

On a cool, windy afternoon, Peter and Carrol were cruising in a 12-foot aluminum boat propelled by a 9.5 horsepower motor. At approximately 3:30 the motor conked out. Stopping as a result of the strong wind, the boat swung broadside and capsized. There were no personal flotation devices aboard and neither Pete nor Carrol could swim. Later investigation revealed the motorboat to be too small for the weather and water conditions. Neither was there any safety equipment on board.

Further research of accident statistics can be valuable in accident prevention and formulation of legislative proposals and law enforcement strategies.

Although bad weather is a frequent precursor of accidents, 56, or 91 percent, of the 1982 accidents occurred in good visibility. And in half of the 16 accidents resulting in fatalities, the water was calm. In fact, only three of the accidents that caused a fatality were attributed to weather conditions.

Statistics can sometimes be misleading, though, because 15 percent of the reported accidents in 1982 were the direct result of hazardous waters. A storm may come up without warning; therefore, all boaters should be able to handle their boats in rough water. If a boater is not sure his boat will take rough water or is unsure of himself—he should get off the water. In the event of lightning, do not hesitate to go ashore—anywhere.

A more frequent cause of accidents was negligence on the part of the boat operators. Speeding or lack of a proper lookout was blamed for 22, or 36 percent, of the 1982 accidents. Fifteen accidents, 25 percent, were the fault of another boater.

Although 44, or 71 percent, of the operators involved in accidents were between 21 and 40 years of age, half of the operators had over 500 hours of experience.

Why this needless waste of property and, more importantly, life? In most cases there is only one boat involved and no one else to blame. Prevention of these accidents comes with knowledge, common sense and practice of boating safety laws.

The Code of Federal Regulations, as it applies to safe boating, was adopted by Virginia in 1960. These laws are for the safety and well-being of all boaters.

For example, all boats propelled by machinery must have an approved personal flotation device on board for each

In an emergency, the proper safety gear may be all that stands between you and disaster. Some things to carry on board: PFD's (one for each passenger); fire extinguisher; anchor and oar; make sure you have enough gas; a whistle.



photos by Photoworks, Inc.



Checklist for Safe Boating Required

- valid certificate of number
- U.S. Coast Guard-approved PFD for each person on board
- throwable device
- fire extinguishers
- running lights
- anchor lights
- ventilation
- sounding device
- flame arrestor
- flares or visual distress signals*

Recommended

- paddle or oar
- first aid kit
- bailing device
- tool kit and spare parts
- anchor and line
- extra line
- flashlight
- foul weather gear
- compass and charts

Equipment requirements vary with the size of the boat; check your motorboat owner's guide for complete information.

*Effective January 1, 1981, this regulation affects boats in coastal or tidal waters where those waters are less than two miles wide.

Clip and carry on your boat, along with your boat registration, in a waterproof container, or laminate in waterproof plastic.

occupant and the PFD's must be readily accessible. Although the law does not require that a PFD be worn, every non-swimmer, regardless of age, and all youngsters should wear an appropriately-sized PFD. Comfortable life preservers designed for various functions, including fishing, canoeing and skiing, are available.

Yet despite the safety values of PFD's, they are apparently not being used by Virginia boaters. In 75 percent of the 1982 accidents, PFD's were available but were not used.

Dave, Jeff and Dick were rafting down the river on a nine-foot vinyl raft. The river was flooded due to recent rains, and the raft went up on a partially submerged log and capsized, throwing all three into the water. Dave and Jeff, wearing personal flotation devices, swam to the river bank and got out. They saw Dick, not wearing a PFD, go downstream and disappear. The investigation revealed that the waters were hazardous, and the three men had no idea how powerful water can be.

Hypothermia is a condition in which the body loses heat faster than it can be replaced. Falls overboard in 50-degree waters could be fatal; a healthy adult stands only a 50 percent chance of survival. In 40-degree water, unconsciousness may occur in as little as 15 minutes.

Body heat is lost when an individual thrashes in the water; therefore, a life preserver or float coat is absolutely essential.

The danger of hypothermia increases if there is alcohol in the blood stream. Alcohol tends to dilate the capillaries. If an intoxicated boater finds himself dumped into cold water, the dilated blood vessels near the skin will cause a rapid loss of body heat.

It is both unsafe and against the law for an intoxicated person to operate a boat. The skipper should be aware of passengers who have had too much to drink. If the whole party must drink—get off the water.

A boating accident must be reported to the Virginia Commission of Game and Inland Fisheries if there is \$200 property damage, if an injured person requires medical treatment or is incapacitated for more than 24 hours, or if a death occurs. *A game warden or police officer should be notified immediately!*

Finally, consider enrolling each family member in a safe boating course with the U.S. Coast Guard Auxilliary or the U.S. Power Squadron. In addition, the Virginia Game Commission has a home study course, "Virginia Better Boating, A Guide to Safety Afloat," available for \$1.00 per copy. For additional information write the Virginia Game Commission at P.O. Box 11104, Richmond, Virginia 23230, or call (804) 257-1000.

Take a safe boating course. Adhere to basic safety rules, wear your PFD, avoid alcoholic beverages and be aware of hypothermia dangers in cold water. Do all these things and you can avoid becoming a statistic.

The majority of tragedies on the water can be eliminated by using common sense. Safe boating is no accident! □



Sandra Harris

The BEST REMEDY

The goal of a new wildlife rehab center in the Shenandoah Valley is to treat and rehabilitate animals so they can return to the wild.

by Sandra Harris

It's love, it's love that makes the world go 'round. . . " So says an old French song. Love may not make the world go 'round but there is little question that love and respect for fellow creatures in the wild was the impetus behind the creation of the Shenandoah Valley Wildlife Treatment and Rehabilitation Center (SVWTRC).

Located on a rolling, 240-acre farm, the center is in picturesque Augusta County near Waynesboro. This new center offers veterinary treatment and rehabilitation for sick, injured and orphaned wildlife at no charge. An active program to educate citizens about the value of wildlife and modern-day threats to it is also in progress.

"Our bottom-line goal is to treat and rehabilitate animals so that they can return to the wild," says Dr. Stuart Porter, director of the veterinary services. "We are not a zoo and we are not taming animals," he stresses. He says he believes the center is the only one in the region that provides both professional veterinary services and rehabilitative programs for wildlife.

The seed for the center grew out of Porter's frustration at treating wildlife and not having a facility where he could have control over the rehabilitation of the animals. Porter is program head of the animal technology program at Blue Ridge Community College in Weyers Cave. In the six years Porter has been at the college, the reputation of this self-professed



Sandra Harris



Edward Clark



Edward Clark

"zoo nut" as a wildlife veterinarian has grown and so has the number of animals brought to the college for treatment. (He has worked in zoos in Memphis, Tennessee and Brownsville, Texas.)

"At first, this was great, but I soon ran out of space and cages at the college in which to keep these animals (mainly birds of prey) during rehabilitation," explains Porter.

On a weekend in early October last year, Porter was venting his concern to mutual friends and lovers of nature, Edward Clark and Nancy Sheffield. "I wish I had somewhere to keep these animals until they can survive on their own in the wild. . . someone needs to do something," exclaimed Porter. At that point, Clark volunteered, "Why don't *we* do it?" One being as impetuous as the other, Porter immediately agreed. Not only do these people make decisions rapidly, but they also make things happen once they decide.

After talking with the Virginia Commission of Game and Inland Fisheries, the U.S. Fish and Wildlife Service (U.S.F.W.S.) and several animal shelters, Porter and Clark realized they had an idea whose time had come.

With the support and encouragement of their wives, Nancy Sheffield and Terry Porter, SVWTRC became an immediate reality. "We all share the workload; both our wives are certified animal technicians with bachelor's degrees in animal science," explains Clark. Ms. Sheffield is a 1979 grad-



Stuart Porter

(Clockwise from top photo, this page) a rehabilitated red-tailed hawk; these great horned owl chicks were raised by Stuart Porter; Dr. Porter examines the wing of a red-tailed; this great horned owl flew to the top of his flight cage when visitors arrived. (Page 9 photo) Ed Clark with a great horned.



Edward Clark

uate of Blue Ridge's Animal Technology program and Mrs. Porter worked with her husband as a technician in the Memphis zoo.

During the last six weeks of 1982, SVWTRC became incorporated, received tax-exempt status and permits from the Game Commission and the U.S.F.W.S. to receive, hold, treat, and house wild animals. "A lot of people do not realize it, but it is illegal for a private citizen to keep wild animals of any kind in captivity without a permit," explains Clark.

The center has also felt the generosity of other animal lovers. All of the legal services necessary to become incorporated and to receive tax-exempt status were contributed for a smile from a Staunton law firm, Rhea, Vellines and Garrison. The center has also received a large amount of hospital equipment from the City of Waynesboro. Clark says the equipment was surplus that had been stored in an emergency civil defense shelter. Clark and Porter checked out the medical supplies that had been stored in airtight containers and found them in "mint condition."

"It would have cost us \$50,000 to purchase this equipment today," estimated Clark. He points out that with this generous donation, the center outgrew its treatment room. "Now we are looking for a house trailer to use as a hospital facility," he says.

(Left) Dr. Porter's rehabilitation program for this red-tailed includes strengthening its wing muscles by holding its legs and raising and lowering the bird. (Below) Ed Clark inspects the infected foot of this great horned owl.



Sandra Harris

Other contributions have arrived in the form of synthetic mesh material to be used in the construction of two 70-foot flight cages from Wayn-Tex, Inc. in Waynesboro; electrical supplies from Southern Electric Company in Staunton; three dozen small animal cages and a constant supply of rats and mice as a food supply for the animals from the University of Virginia Medical School; and \$5,000 worth of hospital equipment from other area hospitals.

"All this and we haven't really started to ask for donations yet. . . a lot of people simply love animals," smiles Clark.

SVWTRC has an informal cooperative arrangement with Blue Ridge Community College and the Game Commission. At the college, animal technology students work with Porter in the veterinary clinic taking radiographs, collecting samples and performing lab tests on injured birds. The wildlife benefit from having access to the top medical facilities for animals at the College.

The Game Commission is responsible for and has authority over all wildlife in Virginia. SVWTRC simply adds to the Commission's limited resources by providing both veterinary treatment and rehabilitation for disabled wildlife. "A sharing relationship with the Commission is not a totally new idea because Stuart has been offering an advisory service and seeing injured wildlife for the Commission for quite some time," adds Clark.

How are animals brought to SVWTRC? Anyone in the state who finds sick, injured or abandoned wild animals is advised to contact the local game warden or SVWTRC. The center's telephone number is (703) 943-WILD. If one of the well-qualified staff members is not immediately available to provide specific instructions on the appropriate care of the animal until it can be brought to the center, a message can be left any time of day and a staff member will return the call as soon as possible. Interested professionals, volunteers and students will be relied upon for support.

"I especially intend to use local veterinarians with such specialties as orthopedics and dentistry for animals," elaborates Porter.

Birds of prey, such as red-tailed hawks, great horned owls, barred owls, and kestrels have been the most frequent patients at the center although Porter says he has also treated a great blue heron, a loon and a swan.

During the last weeks of 1982, over 26 injured birds were treated at the center.

"We started receiving a new bird at the rate of about one every 3½ days," explains Clark.

"Most of the injuries are a result of man's interference with wildlife, such as gunshot wounds or impact from an automobile," says Porter. He explains he has treated birds for broken and fractured bones (including the humerus, radius, and ulna); birds with fractures which healed wrong because they were not seen soon enough, and the bones had to be refractured and reset; and various types of poisonings, including lead and chlorinated hydrogens, such as DDT and organophosphates.

"The heavy metal poisonings offer a great diagnostic and treatment challenge," says Porter. Supportive care includes force feeding and stomach tubing.

The treatment time for most birds is two to four weeks, but Porter says it often takes longer for rehabilitation. Clark, Ms. Sheffield, the Porters and many willing volunteers constructed five flight cages (12 feet square) to assist in the rehabilitation process of the birds. They have plans to construct at least two 70-foot flight cages in the near future.

"If the birds don't have room to fly, their muscles become

weak; they need exercise to build up their muscles and endurance just as any athlete," explains Porter. Rehabilitation of birds involves short flights under controlled conditions, such as holding the legs of the birds and raising and lowering them to exercise their wings. After the wing muscles are strengthened in this manner, the birds are then flown every other day with leather straps on their legs connected to a 30-pound test line on a fishing reel. "This exercise is repeated until the birds can fly well and not be exhausted afterward," notes Porter.

Although the center was set up for the treatment and rehabilitation of sick, injured and abandoned wildlife, Clark intends to see that many of the wildlife never end up at the center. Clark, a "professional conservationist," directs administrative and educational programs. He has worked with conservation groups on state and national levels. Currently he is a management and program consultant to a number of national conservation and environmental organizations across the country. Through information programs to various community groups, he aims to build support for programs which will prevent the problems faced by wildlife. He plans to accomplish this in two phases.

The first phase will be directed toward young people. "By talking with children and young adults in summer camps, schools, and scouting groups, we hope to impress upon them an awareness of wild animals, a sensitivity to their needs and habits, and that animals are best left in their own world," says Clark.

The second part of the program will be directed toward the adult community—"the political decision makers," as Clark calls them.

"A lot of people have latent sensitivities to animals and nature; now, more than ever, people are becoming aware that what they do in the environment doesn't stop with them. For instance, in the use of DDT, people now see a relationship between it and other aspects of life," he explains.

Generosity has been flowing at SVWTRC, but Clark says that much is needed for the center to continue to accommodate the increasing flow of animals.

"Although we have received generous 'in-kind' gifts, the center has a real need for monetary support," he explains. Clark says income from foundations and grants is being pursued but that it may be a long time in coming. He notes the center is a non-profit, public charity.

"We hope to be able to rely on gifts from the general public—gifts from special interest organizations such as hunting, fishing, sporting, and organic gardening groups," he elaborates.

Good old-fashioned compassion abounds at the center.

"It is a real high for me to release a beautiful bird that has been nursed back to health," says Porter. "It does something for me that nothing else can do," he reflects as he walks toward the caged birds patiently waiting for his attention. In the background Clark turns to meet a vehicle that is bringing a great horned owl to Porter and his magical touch of freedom for wildlife. □

The Shenandoah Valley Wildlife Treatment and Rehabilitation Center is facing serious budgetary problems. Despite generous contributions of goods and services such as those mentioned in this article, some things require cash—like the electric bill.

Your tax-deductible contributions can help the center continue their vital work. You may send them to SVWTRC, Rt. 1, Box 35, Waynesboro, Virginia 22980.

In Defense Of AUGUST



by C.H. "Kit" Shaffer

illustrations by Jack Williams

VIRGINIA WILDLIFE

When you think of August, what images come to mind? If you're like most folks, you are not enamored of the month of August. A columnist recently expressed his opinion that it was "the worst month of the year" and that if he had the option of dropping two weeks from the calendar it would be the last two weeks of the eighth month. He emphasized the obvious—that it was a depressing time, with summer and vacations rapidly terminating for another year.

Students of schools, colleges included, undoubtedly share similar views, knowing that they also will shortly return to the "rat-race." Owners of beach resorts and other recreational retreats probably hate to see August go because Labor Day is the unofficial end of traditional vacations and flocks of tourists.

To the hunters of Virginia, August is the end of that undesirable but necessary period which must be tolerated between the spring gobbler season and the fall dove and squirrel seasons.

When I was a young boy, my elders warned of the "dog days of August." It was considered a time when dire, even mysterious things might happen to those who dared venture into the woods or fields. According to the old wives' tales, there was also danger of being bitten by mad dogs during this period, or by poisonous snakes which could be particularly offensive during late summer.

Since I have the dubious honor of having been born under the Zodiac sign of Leo the Lion, I am compelled, out of loyalty, to stand in defense of August. Like some of our best friends, August has pros and cons: even though it has many undesirable features, at the same time, there are numerous compensating factors about the month we should recognize and appreciate.

Let us analyze some of the events which are unique (both good and bad) to August. First, it is usually the hottest period of the summer, with days which are invariably muggy, buggy, sweaty and uncomfortable in general. For relief, the more fortunate people are able to flee to beaches, lakes, the mountains, golf courses or air-conditioned retreats. At the same time, subtle changes begin to occur by the middle of the month which indicate that autumn cannot be far away. Mornings are a shade cooler, and they are frequently hazy and foggy. Dew is especially heavy, but by early October the same moisture will appear as frost.

In the garden, the weeds and insects are waging a furious battle with the remains of vegetables. Tomatoes, after taking too long to ripen earlier in the season, are now so prolific that we can scarcely give them away. Corn and beans are at peak production, but the latter are rapidly losing their fight with persistent beetles.

Morning glories, red root, ragweed, fox tail millet, wire grass and other obnoxious weeds seem to cover every foot of our once-proud gardens. Yards fare no better. They are a sea of crab

August has more to offer than oppressive heat and the end of vacations; here are some of its good points.

grass which appears to need mowing every other day. In the country (where sportsmen spend so much time later during the hunting season), farm production is at its peak. Small grain has long since been combined. The second cutting of hay is in progress, corn is in tassel, and soon the silage cutters will be at work creating future dove fields. Soy beans, tobacco, peanuts, sweet potatoes and other cash crops are growing profusely, and will soon be ready to harvest. In the orchards, peaches are being picked and in kitchens they are being canned and frozen. On the slopes of the Blue Ridge Mountains, apples are beginning to show some color, and it won't be too much longer before we can pick those wine-saps and other delicious varieties.

We walk in the woods where the understory is a mass of honeysuckle, poison ivy and hundreds of other plants. Spider webs try to block woodland paths to the discomfort of hikers. At the same time, there are some good signs for the careful observer and the hunter. Wild grapes, oaks, dogwoods, walnuts, poke-weed and spicebush appear to have a good crop of fruit and nuts for wildlife for the fall and winter months.

In August the squirrels are already busy cutting hickories, walnuts and pine cones. Dogwood berries and sourwood leaves begin turning red—a sure sign that fall and the hunting season are rapidly approaching. High in the mountains, the ginseng hunters search dili-

gently through moist areas for that favorite Oriental (reputed) aphrodisiac with roots that sell like gold. They are also cautiously looking for the timber rattlers and copperheads which are often active in the same habitat.

Down on the lake, fishing isn't too great. However, the wood duck families are still present and growing daily. Before long, they will be joined by the earliest of the waterfowl migrants, the blue-winged teal.

As we drive to the country in August we begin to note doves in increasing



numbers. They line up on utility wires and in small-grain fields. The doves are already beginning to form small flocks and doubtless are beginning to feel the instinct to begin their southern migration.

Farmer friends report numerous observations of flocks of young turkeys and coveys of small quail (about the size of bumble bees). Rabbits are abundant in the evenings and we hope they will still be around in November. Last week we observed a fawn down in the woods, its spots already beginning to fade.

Yes, August is a productive and bountiful month, when food crops and wildlife populations grow and flourish. Without the blessings bestowed on us during this period of the year, just consider how miserable, cold and hungry we would be during January and February! □

Harold Allen's characterization of the 2,000-mile Appalachian Trail is as pertinent today as it was 60 years ago, when the trail was first cut, the first tree was blazed and the first of many hikers strolled down the tree-lined path into the setting sun.

This romantic vision of the Appalachian Trail was first imagined by Benton MacKaye, a Massachusetts forester, author and philosopher, in the October 1921 issue of the *Journal of the American Institute of Architects*.

MacKaye's article initiated 16 years of hard work on the part of many interested outdoorsmen leading to completion of the Appalachian Trail on August 15, 1937. The project was mapped, constructed and blazed by volunteers working through local Appalachian Trail Clubs, Boy Scout troops and numerous other outdoor organizations.

The trail is easily recognizable by a series of white blazes on trees, normally within sight of one another. Trees with two blazes, one on top of the other, indicate the trail is about to make a sharp turn or the hiker should keep an eye out for the regular blazes. Side trails are generally marked with blue blazes, while intersecting trails normally feature a variety of colored blazes.

Although minor changes and relocations have been made since 1937, the general path sliced through the East Coast has remained the same.

Stretching from Maine to Georgia, the trail begins its winding northward trek at Springer Mountain, Georgia, north of Jasper, enters North Carolina and follows that state's border with Tennessee until reaching the Virginia line south of Damascus. The trail then winds its way around Mount Rogers, the highest mountain in Virginia, and through the Jefferson National Forest before crossing Interstate 81 north of Roanoke and basically paralleling the Blue Ridge Parkway. At Rockfish Gap (Afton Mountain), the trail enters the Shenandoah National Park, which it follows for about 100 miles before crossing into West Virginia near Harpers Ferry and cutting through Maryland's narrowest point.

Continuing into Pennsylvania, the trail turns to the east northwest of Harrisburg, slices through northern New Jersey and crosses the Hudson River north of New York City. After passing through western Connecticut and Massachusetts, the trail enters Vermont, where it heads east again south of Rutland. It then cuts through the center of New Hampshire before ending at Mount Katahdin in Baxter State Park in the middle of Maine.

Approximately 400 hikers complete the entire 2,000 miles each year; this takes three to six months of arduous

*"Remote for detachment,
narrow for chosen
company, winding for
leisure, lonely for contem-
plation,*

The Trail

*leads not merely north
and south but upward
to the body and soul of
man."*

by G. Bruce Potter

photos by Michael Warren

hiking, from the trail's highest point, the 6,643-foot Clingmans Dome in the Great Smokies, to its lowest point at the Hudson River, just above sea level.

Most who do hike the entire trail start about mid-March and hike from south to north in order to avoid the spring snows and the summer black fly. Although hikers completing the 2,000 miles receive a patch and a citation from the Appalachian Trail Conference, that is not why they endure at least three months of hiking with a full pack and sleeping on the hard ground.

"For as many people as you have who hike the whole trail, you have a different motivation for each," said Dr. John Albright, past president of the Richmond-based Old Dominion Appalachian Trail Club and a member of the Board of Managers of the Appalachian Trail Conference, the national overseeing organization.

"It is an entirely different type of environment and recreation than you are used to experiencing in day-to-day life. It's quite a getaway and a challenge and adventure," he added.

For those not quite ready to challenge the entire trail, there are 489 miles, more than in any other state, in Virginia. Most of this section is easily accessible from public roads and provides for enjoyable one- or two-day jaunts as well as longer hikes.

The majority of the Appalachian Trail in Virginia is part of either the Shenandoah National Park or the George Washington or Jefferson National Forests, and the regulations along these sections of trail must be carefully adhered to.

In the Shenandoah National Park, a camper-hiker must obtain a permit stating where his campsite is going to be. This helps prevent certain areas from being overused and becoming aesthetically damaged.

This permit is available from the ranger at the entrance station to the Park or from the Park headquarters in Luray and is free of charge.

Campsites must be out of sight of the trail, and open fires or glass of any kind are prohibited in the National Park. The reason for these strict regulations, explained Dr. Albright, is that National Parks, maintained by the United States Department of the Interior, "attract a greater volume of people, who can create a greater damage to the resource."

Rules in National Forests, run by the U.S. Department of Agriculture, are less rigid but should still be followed. Camping is permitted anywhere in the National Forest, as are open fires, as long as dead wood from off the ground is used. It is illegal to cut trees in a National Forest.

Because of the regulation concerning fires, many meals must be prepared with a stove of some type, and hikers must think carefully about what they will take for food during their time in the woods. Generally, the hiker has a choice of three possibilities—canned food, dehydrated food (freeze-dried) or packaged food. Canned food tends to be heavy, however, and freeze-dried food is very expensive, even though it is easy to prepare because it only requires boiling water.

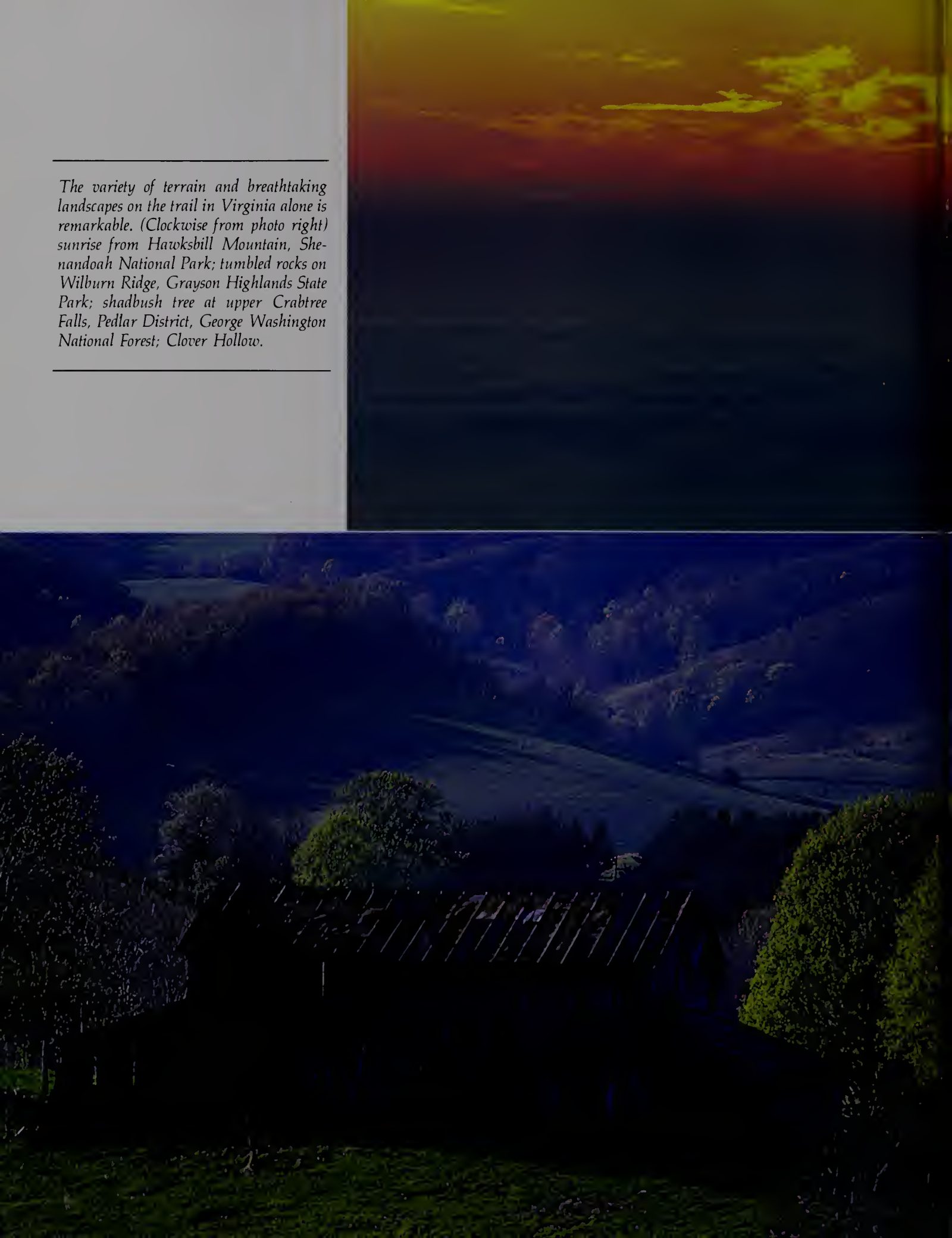
Dr. Albright prefers packaged food. "With ingenuity and experience," he said, "one can make some tasty meals with things bought off the shelf at the grocery store that are not too heavy."

Although there are plenty of streams and springs near the trail, water taken from these should be purified before use. This can be accomplished by either boiling it or by adding chemical tablets.

Food is just one of the necessities that



The variety of terrain and breathtaking landscapes on the trail in Virginia alone is remarkable. (Clockwise from photo right) sunrise from Hawksbill Mountain, Shenandoah National Park; tumbled rocks on Wilburn Ridge, Grayson Highlands State Park; shadbush tree at upper Crabtree Falls, Pedlar District, George Washington National Forest; Clover Hollow.





must be carried along the trail in the hiker's backpack. Some form of shelter, a sleeping bag, mattress pad and basic clothing are also necessary. The extras will determine the weight of the pack and, thus, how easy it is to carry.

Whether a stove uses liquid or canned fuel and the amount of extra clothing carried, as well as the type of food, all contribute to differences in the pack's overall weight.

A good rule when packing for a hike is not to let the weight of the pack exceed one-fourth to one-fifth of the hiker's body weight. Dr. Albright suggests 35 pounds as an optimum weight, but some hikers, particularly those who hike the whole trail, will go to extremes to cut their pack's weight by just a few ounces. Hikers have been known to hollow out the center of their toothbrushes for this purpose.

"The rule that seems to apply best is to carry anything you want—but you carry it," said Dr. Albright.

When planning for a hike, expect to hike approximately two miles per hour, with or without a pack. Obviously, one can go faster than that downhill if the trail is in good condition, but then hiking is slower uphill, so it averages two miles per hour.

If you are carrying only a day pack, it is especially important that you realistically judge how far you can hike in a day, since you will have no shelter, food or extra clothing if you do not reach your destination.

While on the trail, it is best to rest occasionally rather than to overexert oneself; however, the frequency and duration of these rests are matters of personal preference.

If one hikes for more than a quarter-mile without seeing a blaze, he should retrace his steps to ensure he has not missed his turn. And should a hiker become lost, the proven rule is to stay put so others can effectively search. If there is a reason to move, leave an indication of the direction. Building a fire will make searching easier.

Preparation for any hike, especially an extended one with a backpack, consists of participating in any activity that will increase one's cardiovascular efficiency. However, said Dr. Albright, "Nothing will get you in shape for carrying a heavy pack except carrying a heavy pack."

Whether hiking with or without a pack, there is hardly an area in Virginia on the Appalachian Trail that cannot be reached with a relatively short drive. Most areas of the trail have easy access points and can be hiked in a day or two, depending upon their actual mileage.

Perhaps Virginia's most interesting



area on the Appalachian Trail is the Mount Rogers National Recreation Area, located east of Interstate 81 near Damascus in the southwest portion of the state.

Featuring Virginia's two highest mountains, Mount Rogers (5,700 feet) and Whitetop Mountain (5,500), the area provides for both a challenging and an enjoyable hike with some beautiful scenery.

To get to the area, take U.S. Route 58 to Virginia Route 601, a gravel road intersecting the Appalachian Trail where parking is available. Hiking north on the trail for about 3.2 miles, the hiker will reach the summit of Whitetop Mountain, which provides a nice view and spring flowers in June. The hike to the top of the mountain is fairly steep.

However, in accordance with the rule, "what goes up, must come down," the trail gradually descends over the next 2.5 miles until reaching State Route 600. From there, it is 1.9 miles with a 500-foot ascent to the Deep Gap Shelter, one of many lean-to's conveniently located along the trail to shelter four to six hikers for the night.

These lean-to's are often located near a spring and will have a floor or bunks. The shelters are primarily intended for long-distance hikers, but are available on a first-come, first-served basis.

Following the trail for 1.9 miles from the Deep Gap Shelter, the hiker will encounter a blue-blazed trail to his left that leads a half-mile to the summit of Mount Rogers. There is no view from the summit, heavily wooded with spruce trees.

There can be no doubt, though, that there is great satisfaction in ascending Virginia's highest mountain.

From this point, the hiker can either retrace his steps to the shelter, stay there for the night and return to Route 601 the following day, or he can be met at Route 600, which intersects the trail between Whitetop Mountain and Mount Rogers.

For easier hikes, and perhaps ones closer to home for many Virginians in the eastern and northern parts of the state, the Blue Ridge Parkway parallels the trail for most of the distance between Rockfish Gap (Afton Mountain) and Roanoke.

The Parkway provides easy access to the trail at several points over the first 14 miles south of Afton Mountain. One of the best views along this section can be reached by picking up the trail two tenths of a mile beyond the Blue Ridge Parkway Visitor Center. A paved road leads 200 yards to the trail, from where it is seven-tenths of a mile to Humpback Rock and 1.8 miles to Humpback Mountain (3,600 feet), both of which provide

outstanding views.

One of the more exhilarating and spectacular sidetrails in this area leads to Crabtree Falls, reportedly highest waterfall east of the Mississippi River featuring a 1,500-foot drop. Beginning at State Route 56, 6.6 miles east of the Parkway, the 3.5-mile trail provides an outlook for each of the five cascades and ends on Crabtree Farm Road, a half-mile north of the Appalachian Trail.

In addition, the Appalachian Trail generally follows and frequently intersects the Skyline Drive in the Shenandoah National Park. This provides for some short and rewarding hikes.

One of the nicest times of year along the trail is mid-October, when the leaves are changing colors. Also, the cool days at this time of year make for comfortable hiking.

(Opposite page, top) Another pleasant landscape, this one in the Mount Rogers National Recreation Area. (Bottom) Shelters such as this one at Bobblets Gap, Glenwood District, Jefferson National Forest, are available at various points along the trail.

When planning a trip to the Appalachian Trail, remember that temperatures in the mountains are generally lower than those in the valley and Piedmont sections of the state. This rule is particularly true at night, when it can become rather cool, even during the summer.

Throughout the year, the trail is maintained by 66 volunteer organizations and conferences formed solely for that purpose. Under the auspices of the Appalachian Trail Conference, these are the same local organizations that were responsible for the trail's construction.

Each of these local clubs has been assigned a section of the trail to maintain. Such maintenance includes improving footways and drainage, keeping summer growth to a minimum and relocating the trail in a number of places.

Relocation of the Appalachian Trail has been necessary over the years because of pressure from landowners who wish to build on their property traversed by the trail. Originally, the trail was designed as a ridge-top trail because it was assumed no one would ever want to build there.

However, ski resorts now value those areas.

In fact, construction of Wintergreen and other private property in Virginia caused 11 miles of the trail to be relocated south of Rockfish Gap. The trail was originally constructed exactly where the Blue Ridge Parkway lies today and thus had to undergo extensive relocations when the Parkway was built. And the ridge-line in northern Virginia has also become well-developed over the years.

Congress allocated \$90 million in 1978 to provide for the purchase of private property so the trail could be relocated. However, "in the current budgetary situation, money is hard to come by," said Dr. Albright, and the process of buying private property has not yet been finished.

Other problems along the trail include an occasional instance of violent crime, but "it's actually a pretty safe place to be," said Dr. Albright. A more common occurrence is damage or vandalism to cars parked at trail access points.

Finally, because the trail provides such beautiful views and takes advantage of the land on which it is located, according to Dr. Albright, "a conflict exists between the trail community and people who like to drive four-wheel vehicles."

"It is not possible to maintain a viable trail when you have motorized vehicles on it."

In fact, motorized vehicles are prohibited on the trail.

The size of Virginia organizations maintaining the Appalachian Trail ranges from the 3,000-member Potomac Appalachian Trail Club, based in Washington, D.C., to the 50-member Mount Rogers Appalachian Trail Club. Other clubs are based in Richmond, Norfolk, Lynchburg, Roanoke and Blacksburg (Virginia Tech).

As well as maintaining a section of the trail, each club sponsors hiking, backpacking and canoeing trips, not necessarily on the Appalachian Trail.

To get information on the Appalachian Trail Club in your area or to obtain a trail guide and map for a particular section of the trail, write to the Appalachian Trail Conference, P.O. Box 807, Harpers Ferry, West Virginia 25425. There is a charge for the guide books.

Although it is difficult to determine exactly how many people use the Appalachian Trail, the numbers are certainly great. And maintenance of the trail becomes exceedingly difficult as the numbers increase. Each hiker can do his part to ensure the trail's continuing beauty by following the simple rule: "Take nothing but pictures, leave nothing but footprints, kill nothing but time." □

Personalities

New Commissioners

by Francis N. Satterlee

Governor Charles S. Robb recently appointed three new members of the Virginia Commission of Game and Inland Fisheries effective July 1, 1983. The new appointees replace Commissioners James R. Knight, Jr., Allan A. Hoffman and George L. Sheppard, Jr. whose terms expired June 30, 1983.



David A. Fahnestock, commissioner, represents the seventh congressional district which includes Albemarle, Caroline, Clarke, Culpeper, Fauquier, Fluvanna, Frederick, Goochland, Greene, Hanover, Louisa, Madison, Nelson, Orange, Page, Rappahannock, Rockingham, Shenandoah, Spotsylvania, and Warren counties, part of Stafford County, Charlottesville, Fredericksburg, Harrisonburg and Winchester.

Mr. Fahnestock resides in Winchester, where he is an auctioneer.



Latane Trice, commissioner, represents the first congressional district which includes Accomack, Charles City, Essex, Gloucester, James City, King and Queen, King George, King William, Lancaster, Mathews, Middlesex, New Kent, Northampton, Northumberland, Richmond, Westmoreland and York counties, Hampton, Newport News and Williamsburg.

Mr. Trice makes his home in Walkerton, where he is a farmer and general auctioneer.

Russell S. Moon, Jr., commissioner, represents the fifth congressional district, including Amelia, Appomattox, Brunswick, Buckingham, Campbell, Charlotte, Cumberland, Floyd, Franklin, Halifax, Henry, Lunenburg, Mecklenburg, Nottoway, Patrick, Pittsylvania, Powhatan and Prince Edward counties, and part of Chesterfield County, Danville, Martinsville and South Boston.

Mr. Moon is superintendent of the Lunenburg County Schools and lives in Kenbridge.



Non-Game Update

The Little Brown Bat

by Jeffrey M. Curtis

Who would expect a tiny (three to four and a half inches long, with an eight-inch wingspan), quiet creature to provoke such strong and mixed reviews?

But the little brown bat does. On the plus side, this little critter provides valuable insect control. But it is not too popular as an attic resident.

The little brown bat (*Myotis lucifugus*) or myotis has banded, glossy brown fur. The bands appear from the yellow tips on the guard hairs. The facial skin, forearms and feet are dark brown.

Most of the myotis range occurs in the cool temperate and coniferous zones across North America. In the eastern part of the United States, the winter and summer ranges are the same. The western winter range is unknown. In Virginia, most sightings are from the central piedmont west, paralleling the Blue Ridge Mountains north and south.

Best-known for its quick, dipping flight patterns in the evening hours, the little brown is a natural and efficient insectivore. Consuming mostly soft insects such as flies, moths and mayflies, the brown bat will also glean caddisflies and beetles.

Much of the foraging is done over water where a variety of insects are found. Although woods and scattered stands are frequented as the bats go back and forth from ponds and swamps, few observations have been made in woods distant from a good, watery habitat. Food is located by a built-in radar system called *echolocation*. The bat emits a series of high-pitched sounds in varying frequencies. The frequency variance compensates for geographic changes, vegetation density and the emotional state of the bat.

Food consumption is a nocturnal activity undertaken in three basic periods with rest breaks in between. About seven or eight insects are consumed every minute, or 140 insects every 20 minutes. Pregnant bats are more selective in their diets which is believed to be a result of the need for increased caloric intake for energy expended during the female's gestation term. The



future mother needs to assure her developing offspring not only of enough food but the types of food which will promote healthy infant growth with the least possible effort on her part.

Most litters yield one young per year; a litter of two was recorded only once in 312 pregnancies. The mature females, now one year old, will begin breeding in late fall and will continue well into winter. A unique delaying adaptation within the breeding chemistry of the bats allows postponement of ovulation until the spring. Fertilization occurs shortly thereafter. The gestation period of 55 days permits the young to be raised in milder weather, the optimum for infant survival.

After the delayed ovulation-fertilization period, the young will be delivered in pre-established nurseries. A strong bond exists between a mother and her offspring. Retrieval of young which have fallen from their roost has been often noted as has the retrieval of specific infants from an isolated location. Likewise, an infant can recognize the specific calls of its mother from a hidden spot even when in the company of several hundred mother-young pairs.

To acquaint the young to foraging

behavior, the mother carries it on her chest during feeding flights. The infant bats clasp the mother's nipples with their milk teeth and firmly press themselves against her chest with their folded wings.

With as much attention given to the prevention of predatorial depredation the bats all but guarantee infant survival. Some 60 to 65 percent do not survive their first year. Migration to winter roosts takes its toll, hawks and owls harvest a fair share but the major factor is sudden onslaughts of severe weather. Floods from continuous spring rains can destroy a cave site. And an ice storm can wipe out a migrating swarm.

The problems of bats in the attic have totally frustrated some people while others seem to tolerate the visitors with little if any bother. There is the annoyance of droppings, odors and noise with the presence of bats. Other than the unpleasant sanitation problem caused by the animals, concern over their use of an attic or barn should be minimal.

The best way to discourage their using your building is to render the roost uninhabitable. Using a strong dose of moth crystals as an olfactory deterrent has helped. The use of very bright flood lights in the attic will also help. Perhaps the easiest and least expensive method is to close entrance holes. Whichever means you use, take care not to harm the creatures.

If you use these deterrents, the bats will seek the shelter of secondary roost sites. The alternative shelters are usually already chosen and nearby enough that you can still benefit from their penchant for insects.

With the help that *myotis lucifugus* lends us in insect control and the secluded life they lead, we should remember that much of the superstitions about bats are erroneous. In fact, a well designed niche in the natural order is being occupied by the little brown bat. □

Beagles - 1 The System - 0

Citizens can speak their minds at public hearings before the
10 members of the Game Commission.

by Lt. Don Miller

Periodically the Virginia Game Commission conducts a "hearing" and all interested persons are invited to appear before the Commissioners to express their concerns, their ideas, and their views on current and proposed changes in the hunting regulations. Because hunting is so characteristic of America and because of the love and dedication that many hunters have for their sport, they do appear often in large numbers to be heard.

Attending this meeting you can see a complete cross section of the sportsmen of Virginia: the hunters who wade the marshes of the Eastern Shore; the mountain and valley people who "come down to Richmond" from the western edges; a coal miner who is interested in the raccoon season in southwest Virginia; a lawyer from Fairfax County who hunts deer in Bath County; a bird hunter from Richmond; the hunt clubs of the southern piedmont region; an interested landowner from Rappahannock, the muzzleloaders from Rockingham; and the bowhunters from Tidewater.

Discussions sometimes become controversies when one view is, "there aren't any deer left," and a neighbor counters with, "there are too many and they are eating my crops." There are many discussions concerning the length of seasons and bag limits.

Commissioners listen intently to the comments and presentations; then, after consulting the staff biologists and discussing what is in the best interest of Virginia's wildlife resource, they decide on a proposal.

During a recent meeting, there was a retired gentleman, dressed in other than suit and tie, who stood proudly before the 10 Virginia game commissioners and stated his appeal to have one week of early rabbit hunting reinstated to the season east of the Blue Ridge Mountains. His questions were basic as he asked the panel and the chief of the game division, "What's it



F. N. Satterlee



F. N. Satterlee

going to hurt?" and "What harm will it do to hunt rabbits that week?"

His words painted a picture as vivid as an artist's brush of a man standing in a broomsedge meadow on an autumn day; you could almost hear the music as he told of his love for his beagles—and how he wanted to finish out his autumns listening to the cry of the chase.

After his delivery, which had captured the attention of every person in the hall, he was obviously not totally satisfied with the answers he had

received from the commissioners. The old gentleman concluded his speech by saying, "I just don't see why you took that week of rabbit hunting away from me." Then, after a slight hesitation, "And it disappointed my dogs, too." □

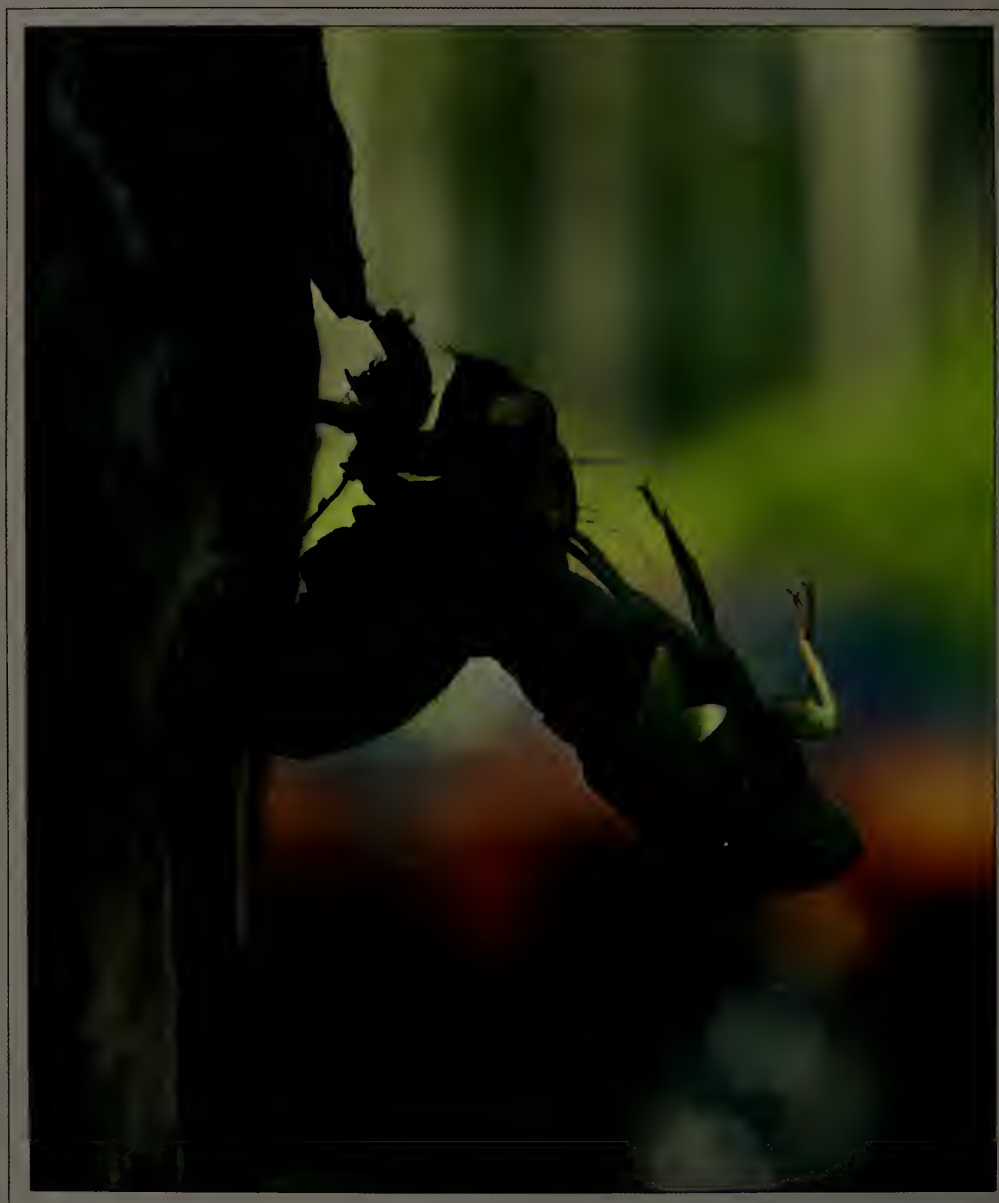
Editor's note: At its April 29 meeting, the Commission passed a regulation reinstating the first Monday of November as the opening day of rabbit season except on the Eastern Shore where it will open on the second Monday. Both seasons close January 31. We hope the gentleman and his beagles are once again happy.

by Richard J. Passaro



The Cicada: A Photo Essay

*The sound made by this insect
is an August tradition.*



The adult begins to emerge from the exoskeleton.

***I**t's a lazy, sultry evening late in the summer. You're lounging in the hammock, looking at the stars, smelling the honeysuckle, and hearing. . .what? What's that whirring, pulsating, shrill noise?*

The cicada, of course. If there's any sound that defines August, it's the male cicada taking the plunge into adulthood. During the hot summer days of July and August, the cicada nymphs cease their subterranean foraging and emerge to begin their brief adult life.

The cicada's life cycle generally lasts between two and five years.



This view from the top shows the split in the old exoskeleton.

However, the periodical cicadas, which occur only in the eastern United States, have lifespans of close to 20 years. These are the so-called 13- and 17-year cicadas. The 17-year cicada is a more northerly occurring insect as opposed to the southern 13-year variety. Each species differs in size, color and song.

***T**he nymphs of these cicadas spend a decade or more underground feeding on the sap of tree roots. Upon emerging from their burrows, the nymphs climb a tree trunk to begin their metamorphosis.*



The adult, now emerged, inflates its body.

***F**irst, the back portion of the exoskeleton splits. This opening allows the adult cicada to, in effect, step out of its old covering.*

As more and more of the insect emerges, the curled wings begin to unravel and harden. Once completely out of the old exoskeleton, the adult cicada will spend several hours riding "piggy-back" atop its recently vacated home. This will allow the new exoskeleton and wings to harden sufficiently for it to fly away. □

Outdoor Notebook



F.N. Satterlee

Assistant Director Named

John P. Randolph (left) has been named assistant executive director of the Commission of Game and Inland Fisheries by Executive Director Richard H. Cross, Jr. In his announcement, Cross noted that he was formally recognizing what Randolph, the agency's former deputy assistant director, had been doing for some time.

The assistant executive director's position has been vacant since Cross left it to become executive director of the agency two years ago.

Randolph, who was a commissioner before becoming deputy assistant director, is an active outdoorsman and a widely-read outdoor writer. He contributes regularly to *Virginia Wildlife*.

Decorative wooden duck decoys created by world-class carvers are on exhibit along with original oil, acrylic and watercolor painting of wildlife scenes. Animal portraits and pen and ink wildlife drawings also are shown.

"No longer does the astute collector have to travel far afield to carving competitions or diverse galleries to discover the finest pieces available in this exciting area of art. We have them right here at Cudahy's," says gallery owner Peter C. Stearns. The 1,200-square-foot, third-floor space at Cudahy's holds the wildlife collection.

Prized duck carvings by Fred Finfrock of Hampstead, Maryland are on exhibit in Richmond for the first time. Two ducks by world-class competition winner Louis Keane of Richmond also are featured.

Finfrock, a relative newcomer to the field, began carving just a few years ago as a diversion from the boredom of the motel room-living his traveling salesman's job demanded. Already beyond the novice level, Finfrock is winning ribbons in national competitions. "Incredible" is the most frequent reaction of people viewing Finfrock's ducks, meticulously carved and painted with life-like feathers.

Among the 14 exhibitors are painters William Redd Taylor of Newport News, widely recognized for his watercolors of birds; Erwin Stock of Davenport, Iowa; Jean Ebersole of Reedville; Willa Frayser of Richmond; Ed Hatch of Spring Grove; Ray Bell of Fairfax and Ned Ewell of Cokeysville, Maryland. (Taylor and Hatch's work have appeared in *Virginia Wildlife*.)

Wood carvers Clifford Earl of Hanover and Fred Neurohr of Richmond are featured in the exhibit as well as the feather works of Barry Walker of Goochland.

Future wildlife shows will include the works of 35 carvers committed to exhibiting at Cudahy's, says gallery director Helen Levinson. □

New Officers Trained

Eight new recruits have joined the Game Commission's law enforcement division. Since their selection in May, these men have been training at Commission headquarters, in the field and at the Criminal Justice Service Commission Basic School in Boydton, Virginia. Now they are ready for their assignments. This month, each will begin working under the supervision of the sergeant in his assigned area. Pictured here are (clockwise from top) Jim Tegeler, Randy Grauer, Bob Mathers, Willie Jones, Stephen Shires, Donald Bradley, Harmon Ranney and (center) Park Slater.



F.N. Satterlee

Richmond Gallery Features Wildlife

A unique exhibit space devoted to fine wildlife art is now open at Cudahy's Gallery, 1314 East Cary Street in Richmond's historic Shockoe Slip.

Virginia Wildlife Federation 18th Conservation Awards Program

The Virginia Wildlife Federation believes that those who work so tirelessly to save and conserve America's priceless natural resources should receive public praise, recognition and appreciation. No nation has been more blessed with natural riches and beauty. No nation can remain strong, its people healthy and happy, its way of life full, rich and meaningful, without wise use, conservation and preservation of those same priceless resources. By recognizing and encouraging conservation leaders, the VWF believes America's future can better be secured. *Virginia Wildlife* readers are invited to nominate conservation leaders for one of this year's conservation awards. Awards will be presented on October 15 at the Hilton Inn, 8th and Oceanfront, Virginia Beach, Virginia. For tickets send \$17 (for each ticket) to Virginia Wildlife Federation, 4602-D West Grove Ct., Virginia Beach, VA 23455.

Sponsored by the Virginia Wildlife Federation and Sears Roebuck and Co.

CATEGORIES

Conservation Educator	Youth Conservationist	Legislative Conservationist
Conservation Organization	Conservation Communicator	Forest Conservationist
Soil Conservationist	Conservationist of the Year	Wildlife Conservationist
Water Conservationist	Clean Air Conservationist	River Conservationist
	Hunter Educator	

VWF 1983 Conservation Awards Nomination Form

To make a nomination, send two copies of this form and all attachments to: VWF Conservation Awards, 4602-D West Grove Ct., Virginia Beach, Virginia, 23455.

Nominee:

Recommended by:

Name _____

Name _____

Complete Address _____

Title _____

Complete Address _____

Award Category _____

Name of Member Club _____

Date _____

Please specify one of the 11 categories for which nomination is made. Use a separate nomination form for each award category and for each individual or group nominated.

Please attach two copies of a resume of achievements not to exceed two typed pages. Include organization memberships, affiliations, past achievements, past recognition, specific acts for which recommendation is based, and other references for comparison. A full documentation is needed by the judging committee.

NOTE: NOMINATIONS MUST BE POSTMARKED NO LATER THAN
MIDNIGHT SEPTEMBER 9, 1983

Project WILD

Since the late 1940's the Virginia Game Commission and the Virginia Division of the Izaak Walton League of America have been cooperating to encourage a better understanding of wildlife in Virginia's schools. This fall the Game Commission will introduce their next jointly-funded project to Virginia's schools, Project WILD.

Project WILD is a multi-disciplinary wildlife education program for use in kindergarten through grade 12. Project WILD was developed through the joint efforts of the Western Association of Fish and Wildlife Agencies and the Western Regional Environmental Education Council (WREEC). WILD is a collection of wildlife-related activities that teach concepts such as carrying capacity, limiting factors, predator-prey relationships and many other aspects of wildlife ecology. It teaches the concepts in interesting, fun and exciting ways. The materials can be used in the teaching of many subjects, including science, math, and language arts. A method for introducing and teaching wildlife ecology and management concepts in schools has been needed for years; Project WILD will help fill that need.

Since the fall of 1982, the Game Commission has been participating in the final testing phase of the project. Virginia, Washington and Colorado were chosen to test the effectiveness of the Project WILD materials. From five of Virginia's school systems 120 teachers were randomly chosen. Some teachers received the WILD materials and attended a WILD workshop, some just received the materials, a third group did not receive materials or a workshop. Each student in 120 classes was tested last fall and again this spring. Results of the testing will be known soon.

The Project WILD materials consist of two activity guides, one elementary level and one secondary level with over 100 activities each. The guides include a glossary of terms, resource lists and other necessary background information for the teacher. The activities were written and reviewed by educators, wildlife biologists, and other professionals over a two-year period.

In order to receive the Project WILD materials, teachers must attend a six-hour workshop sponsored by the Game Commission. The workshops which will begin in October will be held by trained workshop leaders in individual school systems around the state. Teachers who wish to attend a

workshop in their area or administrators who want to schedule a workshop should contact Susan Gilley, Virginia Game Commission, P.O. Box 11104, Richmond, Virginia 23230-1104. The telephone number is 804/257-1000.—Susan Gilley

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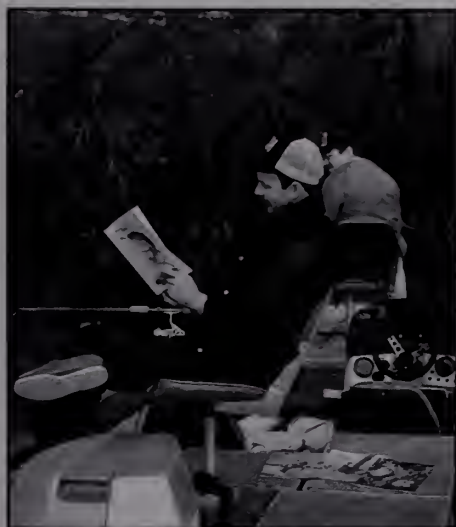


Matt Gentry, Christiansburg News Messenger

Sportsman Recognized

Joseph B. LaPrade (left) receives a certificate of recognition from Larry R. Walls, Virginia game warden of Montgomery County. The award was presented for LaPrade's work as civilian coordinator for the Game Commission's Hunter Education Program for the past several years. LaPrade is an officer in the Shawnee Hunt Club, an organization which has assisted Officer Walls in promoting safety, education and ethics in the shooting sports.

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Despite its soil-benefitting properties, kudzu has, since the 1950's, been viewed as a pest—an unwanted, expanding invader of good cropland. Mention the name of this vegetal immigrant, and the average farmer makes a fist.

But in recent years, some farmers and crop specialists have been recognizing that the plant has *positive* potential.

For 30 years, kudzu's fast-growing, tenacious tendencies have been looked upon with jaundiced eyes. Today, kudzu's growth habits are being demythologized. For instance, many are finding the plant to be *not* as persistent as some think. It *can* be eliminated: either by too many cuttings, or by too much livestock (cattle and hogs) grazing.

That livestock eat kudzu points up that it is a solid forage and hay crop—just the cheap, nutritious, labor-saving crop farmers need during these inflationary times. It can provide silage for farmers who've run out of corn. Once established, kudzu doesn't need to be watered, fertilized (it grows on the poorest of soils) or replanted.

Lately, kudzu's chemicals have been studied to see if something worthwhile can be discovered from this prolific grower. In 1979, graduate students at the University of Alabama found an ingredient in

the plant's stems and leaves that will lower high blood pressure in laboratory rats and perhaps, some day, in humans. Possible new uses for kudzu—such as fermenting its root stock to produce baker's yeast and ethanol fuels—have been unearthed at Vanderbilt University in Nashville.

The Vanderbilt team has also been working on a decomposition process which would separate the softer parts of kudzu's vine while still preserving its high tensile strength fibers to be used in cloth making.

For centuries the Japanese have been making cloth from kudzu fibers. This process is disclosed in a definitive book on the subject written by William Shurtleff and Akiki Aoyagi, *The Book of Kudzu*. This 1977 publication also tells how Orientals have found dozens of uses for kudzu in food, clothing, paper, and medicine. A wire service report in 1977 described how Pynyon Press in Atlanta made high quality art paper from kudzu's stem fibers.

With the potential uses that kudzu offers, one wonders whether the penchant for putting down this pesky, pubescent plant will persist. A survey of many southeastern states reveals that kudzu has been only a mild irritant these days.

But kudzu must be given a chance to prove its worth.

What manner of being is this cursed creature called kudzu?

One cannot appreciate the lushness of kudzu unless one walks through a field of the stuff. The experience is akin to trudging through a field of waterbeds.

The spongy "ocean" splashes a sea of roundish, compound, three-lobed beanlike leaves that "tread" on six-inch stalks springing from a network of ground-hugging, hairy vines. The leaflets, bearing wavy margins, may grow up to a foot

long. They are silvery underneath so that when an occasional gust of wind arrives, the leaflets flip over in sheep-like unison to greet the onlooker with a multitude of gray-gloved waves.

The leaves die off easily at first frost, but this exotic's deciduous ways are hardly a discouraging factor in thwarting its rampant return come spring.

Leaf stalks grow off vines, or runners, that radiate from crowns half-submerged in the ground. Beneath these crowns and at various nodes, roots push down into the soil. The roots are reputed to grow as fast as a foot a day and up to 100 feet during one growing season. Seasonal growth is between 30 and 60 feet.

Walt Schrader of Rock Hill, S.C., one of the pioneers who "had his fingers into" the rooting of kudzu in the South,

noted the plant was called "wahoo" in the early days by those who grew the plant professionally. He measured the speed of the vine's growth many times by placing stakes at the ends of the runners. On a good fertile site vines could grow up to two feet during a 24-hour period, he reported. A more common growth rate is 12 inches a day.

Like most plants, kudzu grows toward the sun. When confronted by vertical obstacles between it and the sun, the plant obeys photo

tropism and climbs. It may climb high, its leaflets shimmering down 60-foot trees like fixed emerald waterfalls. Where long established, kudzu shows evidence of how it reached for the sky, half-inch thick wooden vines spiralling clockwise around tree trunks.

Kudzu's flowers are not always in clear evidence. This is because such vegetation is mature and very thick. During its third year, beginning in July, kudzu begins blooming in clusters of pinkish maroon (some purplish) pea-like flowers on cone-shaped spikes.

Later in summer, flowers also emerge from leaflet axils. Many sources liken the flower's odor to grapes (to this writer the fragrance recalls Kool-aid). Later, seed pods appear, the seed (ideally producing 160 pounds per acre) maturing in the fall.

Kudzu gets its tenacious strength and quick expansiveness from its starchy, energy-laden tap roots which, some claim, can grow to depths of eight to 12 feet, but more commonly six feet. These taproots have several large horizontal branches that can grow three to five feet long. With one source claiming an acre may accommodate 500 crowns, there's no wonder at kudzu's legendary reputation for being a prize erosion control agent.

Kudzu not only grips the soil in place with a system of large roots, but these roots enrich the soil. Being a legume, the plant bears nitrogen-fixing nodules on its roots. This explains why kudzu was heralded for so many years as a cover crop for depleted soils. With so many positive possibilities, maybe kudzu will emerge from its ugly duckling reputation a swan among plants. □

Kudzu:

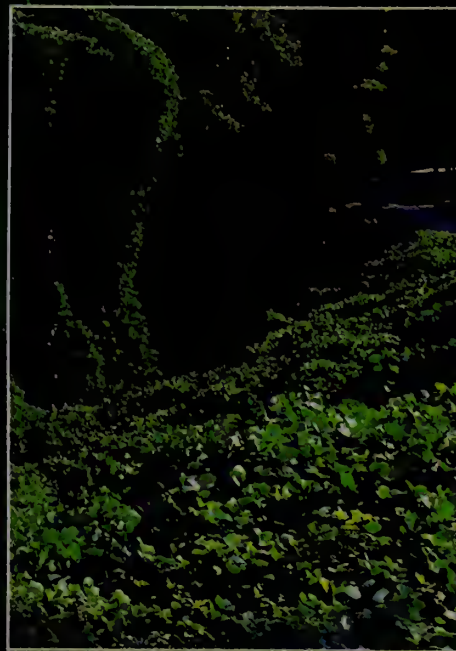
The Plant You Love to Hate

This tenacious trespasser is not just another clinging vine; but is it all bad? Researchers are finding some surprising uses for kudzu.

by William D. Weekes



Because kudzu is so lush and thick (large photo), the tiny flowers (above) are sometimes difficult to find. (Below inset) "It may climb high, its leaflets shimmering down trees like an emerald waterfall."





The Eastern Wood Peewee

More often heard than seen.

by Carl "Spike" Knuth

I stopped briefly in the cool shadows of a thick, mature woodland along a fast-flowing stream. It was cool only by comparison. It's not easy to be cool in August in Virginia. Unfortunately, the cool depths of a summer forest have little air movement and are full of tiny insects. This may not be to the liking of a summer hiker, but it is to the forest dwelling birds that depend on insects for food.

One such bird is a member of the flycatcher family and a common bird of Virginia's summer woodlands, the eastern wood peewee. Like other birds of the thick, primarily deciduous forests, it is more often heard than seen. Its call is described as "pee-wee-e-e" or "pee-du-wee-e-e," the last portion being drawn out with a rising inflection. This is often followed by a short "weee-e-e" or "du-weee-e-e," with a falling, almost questioning inflection. It is one of the few birds that can "sing" its name so plainly and clearly, and once heard and noticed, it becomes easy to recognize. Peewees sing throughout the summer, but with the coming of fall, they become silent.

The eastern wood peewee is about six inches long. Its upper parts are a plain, dark olive or grayish-olive; its head is a bit darker and more brownish. Its underparts are yellowish-white, its breast washed with light olive-gray. The peewee's tail is a deeper, dusky color, set off by a slightly

paler rump. Its wings are a dusky or grayish brown with whitish wing bars and edgings.

The peewee is similar to another common woodlands flycatcher, the eastern phoebe, but it doesn't have a distinct eye ring and it doesn't wag or jerk its tail like the phoebe. It is also noted for its shorter legs and longer wings than other flycatchers. The peewee moves about nervously and quietly while feeding and may suddenly appear, perching on an exposed, dead branch at mid-level in the forest. One of its names is "dead limb bird."

As I sat in the cool shadow, the forest understory patchy with penetrating sunlight, a little peewee sat quietly on a barren limb just above me. It sat in typical flycatcher fashion with body erect. Peewees tend to droop their wings a little and look from side to side, watching for flying insects. Suddenly it darted out at an insect and, with an audible snap of its bill, caught it in mid-air. With fluttering wings it returned to its gently rocking perch.

The peewee is generally thought of as a bird of dense, mature forest growths, but more and more it has appeared in orchards, open groves, parks and small stands of big trees along hedgerows, near lakes or along streams and roads. I've heard them in the loblolly pine, oak and greenbrier of Virginia's Eastern Shore.

Peewees arrive in late April or early May, about the same time the warblers

begin migrating through Virginia.

These migrations appear to be linked with insect hatches which are in turn often linked to tree leaf development. Insects constitute some 99 percent of the peewee's food in the form of bees, wasps, flying ants and various flies. The other one percent is made up of wild berries, a food source utilized a little more on its wintering grounds in South America.

The peewee breeds in southern Canada and most of the eastern United States as far west as Texas and Nebraska. Peewees are late nesters, often waiting until well into June. Its nest is a clean, compact structure of dry grass, vegetable fibers, moss and lichens glued together with spider webs for camouflage. The nest is usually built on a horizontal branch 20 or more feet high, and with all the natural camouflage, it looks like a large knot. The peewee lays two to four cream-colored eggs, blotched with a wreath of dark brown and lilac at the large end. Like other flycatchers, these normally calm, timid birds will defend their nests with great ferocity.

The young are fed and cared for like most songbirds and grow quickly on their insect diets. In fall, the young of the year will occasionally migrate with fall warblers. Adult peewees leave Virginia in mid- to late September. They winter in Central America and northern South America from Nicaragua to Columbia and Peru. □

